

# METHOD AND SYSTEM FOR DETERMINING LOCATION BY IMPLICATION

## Abstract

Systems and methods for determining location by implication are described. A responsive environment includes a location determination method that operates in an area that is only partially instrumented with location-sensing devices. Some of the with location-sensing devices sense location ambiguously. For example, a location-sensing device may be deployed at a boundary between two target objects or areas of interest. The location of the target object, as reported by such devices, is considered ambiguous.

While the object or person is known to be in a space, it is not clear which specific space. The location of ambiguously located objects can be disambiguated based on changes in the location of other objects. For example, if a document is placed on a shelf in an office, such action strongly implies that someone is in the office.

Therefore, if a person is known to potentially be in the office or the outside hallway, the person's location is changed to be in the office.